REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application and indicating that the drawings filed on November 14, 2003 are accepted.

Disposition of Claims

Claims 1-23 are pending in this application. Claims 1, 13, and 21 are independent. The remaining claims depend, directly or indirectly, from claims 1, 13, and 21.

Claim Amendments

Claims 1, 4, 11, 13, 19, and 21-23 have been amended in this reply. Claims 1, 4, 11, 13, 19, and 21-23 have been amended to clarify antecedent basis and address claim objections. Further, independent claims 1, 13, and 21 have been amended to clarify the scope of the invention. No new matter has been added by way of these amendments as support can be found, for example, in paragraph [0050] of the specification.

Claim Objections

Claims 1 and 4 are objected to for including typographical errors. Claims 1 and 4 have been amended to correct the aforementioned typographical errors. Accordingly, withdrawal of these objections is requested.

Rejection(s) under 35 U.S.C § 101

Claims 13-20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically, the Examiner rejects these claims as reciting elements that are directed to software, or data structures, per se. To the extent the rejection may apply to amended claims 13-20, the rejection is traversed.

Claim 13, as amended, recites, in part, "a processor; a first buffer associated with the processor...a second buffer associated with the processor." The recited processor is clearly not computer software, or data structures as indicated by the Examiner, "hardware elements such as a processor ...[provide] the necessary realization of functionality." *See* Office Action dated February 21, 2007.

For at least these reasons, claim 13 complies with the statutory subject matter requirement of 35 U.S.C. §101. Claims 14-20 depend either directly or indirectly from claim 13 and satisfy the requirements under 35 U.S.C. § 101 for at least the same reasons as amended independent claim 13. Accordingly, withdrawal of this rejection is requested.

Rejection(s) under 35 U.S.C § 112

Claims 1-12 and 19 stand rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter.

Specifically claims 1, 2, 4, and 6-9 are rejected for insufficient antecedent basis. Claims 2-12 are further rejected as being dependent upon a rejected base claim (*i.e.* claim 1).

Claim 1 has been amended to correct the lack of antecedent basis in claims 1, 2, 4, and 6-9. Accordingly, withdrawal of this rejection is respectfully requested.

Further, claims 11 and 19 are rejected for lack of antecedent basis. Claims 11 and 19 have been amended to correct the lack of antecedent basis. Accordingly, withdrawal of these rejections is respectfully requested.

Rejection(s) under 35 U.S.C § 103

Claims 1-7, 10 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Pub. No. 2002/0199172 (hereinafter "Bunnell") in view of U.S. Patent Application Pub. No. 2003/0084375 (hereinafter "Moore"). To the extent this rejection may still apply to the amended claims, the rejection is respectfully traversed.

To establish a prima facie case of obviousness under 35 U.S.C. § 103(a), "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2143.03. Further, "all words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP § 2143.03.

Turning to the rejection of claims 1-7, 10 and 11, independent claim 1 as amended, recites, in part,

> wherein executing the execution control block on the processor to obtain data *and* switching an active status between the first buffer and the second buffer are *mutually exclusively* performed using the processor. (Emphasis Added)

In other words, claim 1, as amended, recites that the procedures of executing the execution control block and switching the active buffer are mutually exclusive performed by the same processor without interleaving. Thus, the invention provides the desired serialization for lossless buffer switching, without using synchronization primitives and without limiting the contexts that may be instrumented by the tracing framework. *See* Paragraph [0050] of the Specification.

As admitted by the Examiner, Bunnell does not disclose "wherein the interrupt on the processor is disabled prior to switching the first buffer to inactive and the interrupt is enabled after setting the second buffer to active." *See* Office Action dated February 21, 2007 at page 5. Accordingly, Bunnell cannot disclose the mutually exclusive performance of the two procedures (*i.e.,* executing the execution control block and switching the active status between two buffers) with the use of interrupts as claimed in amended independent claim 1.

Applicant asserts that Moore does not teach what Bunnell lacks. The Examiner erroneously equates disabling an interrupt on a processor prior to switching the first buffer to inactive and enabling the interrupt after setting the second buffer to active, as claimed in independent claim 1, with "interrupt disablement" as disclosed in Moore. *See* Office Action dated February 21, 2007 at page 5. "Interrupt disablement" describes a system or process to update a particular component (*e.g.,* store data in a buffer) by disabling interrupts, updating the component and thereafter enabling the interrupt. *See* Moore, paragraph [0067].

Updating a component is not equivalent to the use of interrupts for switching an active status between multiple buffers. Accordingly, Moore cannot disclose disabling the interrupt on a processor prior to switching the first buffer to inactive and enabling the interrupt after setting the second buffer to active.

Moreover, even assuming *arguendo* that Moore describes using interrupt disablement for switching the active status between two buffers, Moore does not expressly or inherently describe the mutually exclusive performance of *both* executing an execution control block to obtain data and switching the active status between first buffer and the second buffer using the same processor. Moore does not disclose executing an execution control block as evidenced by the fact that the Examiner relied solely on Bunnell to disclose executing the execution control block. Accordingly, Moore cannot describe the *mutually exclusive performance of both* executing an execution control block and switching the active status between two buffers. In fact, a thorough review of Moore reveals that Moore is completely silent with respect to mutually exclusively executing an execution control block and switching the active status between two buffers on the same processor.

Thus, Bunnell and Moore, whether considered separately or in combination fail to render independent claim 1 obvious. Claims 2-7, 10, and 11 depend directly or indirectly from claim 1 and are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell and Moore in view U.S. Patent No. 6, 848,046 (hereinafter "Zimmer"). As explained above, Bunnell and Moore fail to disclose all of the limitations of independent claim 1. Further, Zimmer fails to supply that which Bunnell and Moore lack, as evidenced by the fact that the Examiner relies on Zimmer solely for the purpose of allegedly disclosing a "linked list" and "linked list pointers." *See* Office Action dated February 21, 2007 at page 9. Thus, Bunnell, Moore, and Zimmer, whether considered separately or in combination, fail to render independent claim 1 obvious. Claims 8 and 9, which depend directly or indirectly from claim 1, are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claims 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell and Moore in view U.S. Patent Application Pub. No. 2004/0193945 (hereinafter "Eguchi"). As explained above, Bunnell and Moore fail to disclose all of the limitations of independent claim 1. Further, Eguchi fails to supply that which Bunnell and Moore lack, as evidenced by the fact that the Examiner relies on Eguchi solely for the purpose of allegedly disclosing a "preset interval." *See* Office Action dated February 21, 2007 at page 10. Thus, Bunnell, Moore, and Eguchi, whether considered separately or in combination, fail to render independent claim 1 obvious. Claim 12, which depends directly from claim 1, is patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claims 13-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell in view of "SoftFLASH: Analyzing the Performance of Clustered Distributed Virtual Shared Memory" by Erlichson et al. (hereinafter "Erlichson"). Claim 13, as amended, recites, in part,

> wherein executing the execution control block on the processor to obtain data *and* switching an active status between the first buffer and the second buffer are *mutually exclusively* performed using the processor. (Emphasis Added)

As explained above, Bunnell fails to disclose at least this limitation. Further, Erlichson fails to supply that which Bunnell lacks, as evidenced by the fact that the Examiner relies on Erlichson solely for the purpose of allegedly disclosing a "cross-calls." *See* Office Action dated February 21, 2007 at page 11. Thus, Bunnell and Erlichson, whether considered separately or in combination, fail to render independent claim 13 obvious. Claims 14 and 15, which depend directly from claim 13, are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell and Erlichson in view of Moore. Claim 16 depends directly from claim 13. As explained above, Bunnell and Erlichson fail to disclose all of the limitations of independent claim 13. Further, Moore fails to supply that which Bunnell and Erlichson lack, as evidenced by the fact that the Examiner relies on Moore solely for the purpose of allegedly disclosing "wherein the cross-call comprises disabling an interrupt on the processor prior to setting the first buffer to inactive and enabling the interrupt after setting the second buffer to

active." *See* Office Action dated February 21, 2007 at pages 11-12. Thus, Bunnell, Erlichson, and Moore, whether considered separately or in combination, fail to render independent claim 13 obvious. Claim 16 is patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claims 17-19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell and Erlichson in view of U.S. Patent Application Pub. No. 2003/0135787 (hereinafter "DeWitt"). Claims 17-19 depend directly from claim 13. As explained above, Bunnell and Erlichson fail to disclose all of the limitations of independent claim 13. Further, DeWitt fails to supply that which Bunnell and Erlichson lack, as evidenced by the fact that the Examiner relies on DeWitt solely for the purpose of allegedly disclosing "wherein the tracing framework is configured to disable an interrupt prior to obtaining data from the probe and enable the interrupt after obtaining data from the probe." *See* Office Action dated February 21, 2007 at page 12. Thus, Bunnell, Erlichson, and Moore, whether considered separately or in combination, fail to render independent claim 13 obvious. Claims 17-19 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell and Erlichson in view of U.S. Patent No. 6,952,664 (hereinafter "Lahiri"). Claim 20 depends directly from claim 13. As explained above, Bunnell and Erlichson fail to disclose all of the limitations of independent claim 13. Further, Lahiri fails to supply that

which Bunnell and Erlichson lack, as evidenced by the fact that the Examiner relies on Lahiri solely for the purpose of allegedly disclosing "a drop count." *See* Office Action dated February 21, 2007 at page 13. Thus, Bunnell, Erlichson, and Lahiri, whether considered separately or in combination, fail to render independent claim 13 obvious. Accordingly, withdrawal of this rejection is requested.

Claims 21 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell and Erlichson in view of U.S. Patent Application Pub. No. 2003/0056200 (hereinafter "Li"). Claim 21, as amended, recites, in part,

> wherein executing the execution control block on the processor to obtain data *and* switching an active status between the first buffer and the second buffer are *mutually exclusively* performed using the processor. (Emphasis Added)

As explained above, Bunnell and Erlichson fail to disclose at least this limitation. Further, Li fails to supply that which Bunnell and Erlichson lack, as evidenced by the fact that the Examiner relies on Li solely for the purpose of allegedly disclosing "execution and tracing of target code on a plurality of nodes." *See* Office Action dated February 21, 2007 at page 15. Thus, Bunnell, Erlichson, and Li, whether considered separately or in combination, fail to render independent claim 21 obvious. Claim 23 which depends directly from claim 21, is patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunnell, Erlichson, and Li, in view of Moore. Claim 22 depends directly from claim 21. As

explained above, Bunnell, Erlichson and Li fail to disclose all of the limitations of independent claim 21. Further, Moore fails to supply that which Bunnell, Erlichson, and Li lack, as evidenced by the fact that the Examiner relies on Moore solely for the purpose of allegedly disclosing "wherein the cross-call comprises disabling an interrupt on the processor prior to setting the first buffer to inactive and enabling the interrupt after setting the second buffer to active." *See* Office Action dated February 21, 2007 at page 16. Thus, Bunnell, Erlichson, Li and Moore, whether considered separately or in combination, fail to render independent claim 21 obvious. Claim 22 is patentable for at least the same reasons. Accordingly, withdrawal of this rejection is requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03226/351001; SUN040253).

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Respectfully submitted,

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